

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Currently amended claims are shown with additions underlined and deletions in ~~striketrough text~~. No new matter is added by this amendment.

Listing of Claims:

1. (Currently amended) ~~A method of controlling the display of an articulated graphical image in a graphical environment, the method comprising:~~
sensing a manipulation of a user an object configured to be coupled to a host computer system that includes a graphical environment;
controlling updating data values associated with at least one of the a displayed orientation position or and a displayed shape of the a articulated graphical image in the graphical environment in relation to the sensed manipulation; and
when the articulated graphical image interacts with a graphical object, changing the relationship between the sensed manipulation and the at least one of the displayed position or orientation and the displayed shape of the articulated graphical image and the sensed manipulation based on a simulated interaction of the graphical image with a graphical object.
2. (Currently amended) A ~~The method according to of~~ claim 1, further comprising calculating wherein the articulated graphical image interacts with a graphical object, the one of the displayed orientation and the displayed position or shape of the articulated graphical image is calculated by an algorithm.
3. (Currently amended) A ~~The method according to of~~ claim 2, wherein ~~the algorithm uses calculating includes using~~ constraints to calculate the at least one of the displayed orientation and the displayed position or shape of the graphical image.
4. (Currently amended) A ~~The method according to of~~ claim 2, wherein ~~the algorithm uses calculating includes using~~ numerical methods to calculate the at least one of the displayed orientation and the displayed position or shape of the graphical image.

5. (Currently amended) ~~A~~ The method according to of claim 2, wherein ~~the algorithm comprises calculating~~ includes using a quadratically converging and linearly scalable constraint solver.

6. (Currently amended) ~~A~~ The method according to of claim 1, wherein the ~~user-object~~ is articulatable.

7. (Currently amended) ~~A~~ The method according to of claim 1, wherein the ~~user-object~~ is capable of providing a configured to provide haptic feedback sensation to the user.

8. (Currently amended) ~~A~~ The method according to of claim 7, wherein the haptic sensation feedback is related to associated with the simulated interaction of the graphical image and the graphical object.

AN 9. (Currently amended) ~~A method of controlling the display of a graphical image in a graphical environment, the method comprising:~~

~~sensing a manipulation of a user an object configured to be coupled to a host computer system including a graphical environment;~~

~~controlling the updating data values associated with at least one of a displayed position or orientation and a displayed shape of the a graphical image in the graphical environment in relation to the sensed manipulation; and~~

~~when the articulated graphical image interacts with a graphical object, changing the relationship between the sensed manipulation and the at least one of the displayed position or orientation and displayed shape of the graphical image and the sensed manipulation by calculating a position at least one of the displayed orientation or and displayed shape of the graphical image using an algorithm using numerical methods.~~

10. (Currently amended) ~~A-The method according to of claim 9, wherein the algorithm comprises calculating includes using a quadratically converging and linearly scalable constraint solver.~~

11. (Currently amended) ~~A-The method according to of claim 9, wherein the user-object is capable of providing a configured to provide haptic sensation feedback to the user.~~

12. (Currently amended) ~~A-The method according to of claim 11, wherein the haptic sensation feedback is related to the associated with a simulated interaction of the graphical image and the graphical object.~~

13. (New) A method, comprising:

sensing a manipulation of an object configured to be coupled to a host computer system including a graphical environment;

A~
updating data values associated with at least one of a position and a shape of an articulated graphical image in the graphical environment based on the sensed manipulation, the articulated graphical image having a first image portion and a second image portion, the first image portion being movable with respect to the second image portion; and

changing the relationship between the sensed manipulation and the at least one of the position and shape of the articulated graphical image.

14. (New) The method of claim 13, further comprising calculating the at least one of the position and shape of the articulated graphical image.

15. (New) The method of claim 14, wherein calculating includes using constraints to calculate the at least one of the position and the shape of the graphical image.

16. (New) The method of claim 14, wherein calculating includes using numerical methods to calculate the at least one of the position and the shape of the graphical image.

17. (New) The method of claim 14, wherein calculating includes using a quadratically converging and linearly scalable constraint solver.

A²
18. (New) The method of claim 13, wherein the object is configured to provide haptic feedback.

19. (New) The method of claim 18, wherein the haptic feedback is associated with a simulated interaction of the graphical image and the graphical object.
